

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1, 2 and 16 have been amended to further recite that the furnace gas in the melting step is allowed to flow in the direction of the movement of the hearth from the melting step to the cooling step using the flow rate-controlling partitions. Basis is found at page 11, lines 4-7, and at page 19, lines 1-5.

Claims 1-5, 7-8 and 15-16 were again rejected under 35 U.S.C. § 103 as being obvious over Kamikawa et al. Applicants wish to thank Examiner Yang for the courtesy of an interview on November 3, 2010 at which time this rejection was discussed. Applicants there presented arguments corresponding to those set forth in the prior response. In particular, Applicants emphasized that Kamikawa et al repeatedly emphasizes that the partitions are provided to “suppress” the flow of air. For example, the movable partition plate 73 in Fig. 8 is not movably mounted to allow air flow but to follow the height of the layer of compacts to that the flow of air can be “suppressed reliably” (col. 9, lines 11-13). Therefore, this reference could not teach that the furnace gas in the cooling step is allowed to flow in the direction of the movement of the hearth using the flow rate-controlling partitions.

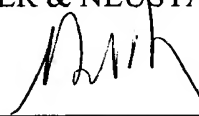
Claims 1, 2 and 16 now further recite that the furnace gas in the cooling step is allowed to flow in the direction of the movement of the hearth from the melting step to the cooling step using the flow rate-controlling partitions, e.g., from zone Z3 to zone Z4 in the figures. The pressure of the gas in the melting step can therefore be maintained higher than that in the other steps to reduce possible reoxidation (p. 19, lines 6-10 and 17-22; p. 26, lines 13-18). In contrast, the partition 53c in Kamikawa et al *suppresses* the flow of air from the high temperature melting sections S toward the discharge portion 45 (col. 8, lines 24-31). The gases generated in the melting section S must therefore be vented via the off-gas duct 40,

whereby the melting section is kept at a negative pressure (col. 7, lines 57-61). Thus, amended Claims 1, 2 and 16 are believed to define over Kamikawa et al.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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